
**Contributions from the Herbarium of the
Geological Survey of Canada.**

(By Permission of the Director.)

By JAMES M. MACOUN,
Curator of the Herbarium.

IX.

Reprinted from the Canadian Record of Science, Jan. and April, 1896.

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CONTRIBUTIONS TO CANADIAN BOTANY.

By JAMES M. MACOUN.

IX.

DELPHINIUM SIMPLEX, Dougl.

About two miles above the mouth of the Kootanie River, B.C., 1889. (*John Macoun*, Herb. No. 10,597.)
New to Canada.

ALYSSUM CALYCINUM, L.; Macoun, Cat. Can. Plants, Vol. I,
p. 53.

Near Blackwell Station, Lambton Co., Ont. (*T. C. Wheatley*.)

¹ Trans. R. Soc. Can. XII. iii. 30.

POLYGALA INCARNATA, L.

Walpole Island, Lambton Co., Ont., 1894. (*C. K. Dodge.*)
New to Canada.

POLYGALA SENEGA, L., var. LATIFOLIA, T. & G.

Georgian Bay, Lake Huron, 1889. (*J. M. Dickson.*)
New to Canada.

SAGINA DECUMBENS, Torr. & Gray; Macoun, Cat. Can.
Plants. Vol. I., p. 79.

Hillsides, Farewell Creek, Cypress Hills, Assa. Herb.
No. 11,710.¹ (*John Macoun.*)

DESMODIUM MARILANDICUM, F. Boott.

Near Blackwell Station, Lambton Co., Ont., 1893.
(*T. C. Wheatley.*) New to Canada.

DESMODIUM ROTUNDIFOLIUM, DC.; Macoun, Cat. Can.
Plants, Vol. I., p. 118.

Niagara Falls, Ont. (*R. Cameron.*) Near Blackwell
Station, Lambton Co., Ont. (*C. K. Dodge.*)

VICIA SEPIUM, L.

In ditches in a ravine west of Hamilton, Ont. (*J. M. Dickson.*) New to Canada. Introduced.

LUDWIGIA POLYCARPA, Short & Peter.

Since recording in Part I. of these papers the occurrence of this species, at Amherstburg, it has been reported from the vicinity of Sarnia by Mr. Chas. K. Dodge.

EPILOBIUM WATSONI, Barbey.

New Westminster, B.C. (*A. J. Hill. Rev. H. H. Gowen.*)
New to Canada.

¹ Whenever herbarium numbers are given, they are the numbers under which specimens have been distributed from the herbarium of the Geological Survey of Canada.

LYTHRUM SALICARIA, L.

In No. VII. of these papers, it was stated that this species had not been recorded from Eastern Ontario until found at Ottawa, in 1895, by Mr. Tourchat. This was a mistake. It had been before collected at Ottawa by Mr. William Scott, and was recorded in *Flora Ottawaensis*, p. 32.

PASTINACA SATIVA, L.

Spence's Bridge, B.C.; common in old gardens and waste places on Vancouver Island. (*John Macoun.*) Not recorded west of Manitoba.¹

PEUCEDANUM EURYCARPUM, C. & R.; Macoun, Cat. Can. Plants, Vol. I., p. 329.

From the east end of the Cypress Hills west to the Rocky Mountains, 1894, 1895. Herb. Nos. 4,963 and 10,692-3-4-5. (*John Macoun.*) Not before recorded east of Rocky Mountains.

PEUCEDANUM TRITERNATUM, Nutt.; Macoun, Cat. Can. Plants, Vol. I., pp. 187 and 536; and Vol. II., p. 329.

Milk River, Assa. Herb. No. 10,688. (*John Macoun.*) Eastern limit.

DAUCUS CAROTA, L.

Common in meadows on Vancouver Island, and apparently naturalized.

CORNUS PUBESCENS, Nutt.; Macoun, Cat. Can. Plants, Vol. I., pp. 191 and 538.

Donald, Columbia River, B.C.; north of Pass Creek, Sproat, B.C. (*John Macoun.*)

CORNUS PUBESCENS, Nutt., var. CALIFORNICA, C. & E.

Woods at Revelstoke, Columbia River, B.C., 1890. (*John Macoun.*) Only Canadian station.

¹ The geographical limits given in these papers refer to Canada only.

NYSSA AQUATICA, L.

N. multiflora, Wang. ; Macoun, Cat. Can. Plants, Vol. I., p. 192.

Many fine trees of this species grow at Queenston Heights, and near Niagara-on-the-Lake, Ont., but it has apparently never been recorded from that vicinity.

ADOXA MOSCHATELLINA, L. ; Macoun, Cat. Can. Plants, Vol. I., p. 193.

Athabasca River, below the Cascades. (*Miss E. Taylor*.)
Athabasca River, Lat. 56°. (*Jas. M. Macoun*.)

SAMBUCUS GLAUCA, Nutt. ; Macoun, Cat. Can. Plants, Vol. II., p. 331.

In woods at Deer Park, Lower Arrow Lake, Columbia River, B.C. (*John Macoun*.) Eastern limit.

VIBURNUM DENTATUM, L. ; Macoun, Cat. Can. Plants, Vol. I., pp. 194 and 538.

Foster's Flats, Niagara River, Ont. (*John Macoun*.)
Near Sarnia, Ont. (*C. K. Dodge*.)

VIBURNUM OPULUS, L. ; Macoun, Cat. Can. Plants, Vol. I., p. 195.

Prof. Macoun, in his Catalogue, makes the Saskatchewan the western limit of this species. We have now specimens from Sproat, B.C. ; Sicamous, B.C. ; and Agassiz, B.C. (*John Macoun*.)

LONICERA CILIOSA, Poir. ; Macoun, Cat. Can. Plants, Vol. I., p. 196.

Woods at Sproat and Deer Park, Columbia River, B.C. ; Yale, B.C. (*John Macoun*.)

LONICERA UTAHENSIS, Wats. ; Macoun, Cat. Can. Plants, Vol. I., p. 540.

Sheep Mountain, Waterton Lake, Rocky Mountains ;

Deer Park, Lower Arrow Lake, B.C.; Revelstoke, B.C.;
Sicamous, B.C. (*John Macoun.*)

GALIUM APARINE, L.; Macoun, Cat. Can. Plants, Vol. I,
p. 200.

The only western station for this plant given by Prof. Macoun is Victoria, Vancouver Island. It has since been found to be of very general distribution in British Columbia. Our specimens are from Elk River Bridge, Rocky Mountains. (*Dr. Geo. M. Dawson.*) Deer Park, Lower Arrow Lake, Columbia River, B.C.; Ainsworth, Kootanie Lake, B.C.; Kamloops, B.C.; Yale, B.C.; Agassiz, B.C.; Lulu Island, B.C.; Salt Spring Island, Gulf of Georgia; common on Vancouver Island. (*John Macoun.*) Specimens from some of the above localities have been distributed as var. *Vaillantii*, Koch, but they are true *G. Aparine*. We agree with Dr. Greene that though this species is "as much at home in our woods and thickets as any indigenous plant, it is probable that it came hither from the Old World within the last two centuries."

SHERARDIA ARVENSIS, L.

In fields, Victoria, Vancouver Island, 1893. (*John Macoun.*) Not before recorded west of Ontario.

ASPERULA ARVENSIS, L.

Edge of a marsh, near Hamilton, Ont. (*J. M. Dickson.*)
New to Canada.

LIATRIS SCARIOSA, Willd.; Macoun, Cat. Can. Plants,
Vol. I., p. 208.

Near Sarnia, Lambton Co., Ont. (*C. K. Dodge.*) Not recorded from Ontario since collected by MacLagan. Not having seen MacLagan's specimens, Prof. Macoun, when preparing his Catalogue, was of the opinion that MacLagan's stations for *L. scariosa* should be referred to *L. cylindrica*.

ASTER CONCINNUS, Willd.

A specimen of this rare *Aster* was sent to our herbarium by Mr. Eugene A. Rau in December, 1890. The label reads thus: "Moraviantown (formerly called New Fairfield) near railroad station, Bothwell, Ontario, Canada. Collected by Robert Rau, Sept. 30th, 1872. Identified by Prof. Porter." Specimens collected by Jas. M. Macoun, at Point Edward, Ont., in 1884, have been doubtfully referred here. They differ very slightly from Mr. Rau's specimen, and are not referable to any other species.

ASTER CONSPICUUS, Lindl.; Macoun, Cat. Can. Plants, Vol. I, pp. 220 and 544.

In rocky thickets at Sicamous, B.C. (*John Macoun.*) Western limit.

ERIGERON ARMERLEFOLIUS, Turcz.; Macoun, Cat. Can. Plants, Vol. I, p. 235.

Additional stations for this species are: Chaplin, Old Wives Lakes, Assa., Herb. No. 10,840; Fort Walsh, Cypress Hills, Assa.; Hand Hills, Alberta; St. Mary's River, Alberta, Herb. No. 10,839; Cave Avenue, Banff, Rocky Mountains; Sicamous, B.C.; Kamloops, B.C. (*John Macoun.*) Not before recorded west of the prairie region.

ERIGERON OCHROLEUCUS, Nutt.

Summit of Sheep Mountain, Waterton Lake, Rocky Mountains. Herb. No. 10,858. (*John Macoun.*) New to Canada. Flowers purplish, turning to a dirty chrome yellow when the specimens have been badly dried. The description in Torr. & Gray, Fl. II., p. 178, is a much better one than that in Gray's Syn. Flora.

ERIGERON STRIGOSUS, Muhl.; Macoun, Cat. Can. Plants, Vol. I, p. 234.

Near Belly and St. Mary's rivers, Alberta; Griffin Lake, B.C.; Sproat, B.C.; Ainsworth, Kootanie Lake, B.C.;

Alberni, Vancouver Island. (*John Macoun.*) Not before recorded west of Assiniboia. The Sproat specimens are the var. *discoidens*, Robbins.

ERIGERON UNIFLORUS, L.; Macoun, Cat. Can. Plants, Vol. I., pp. 231 and 547.

Summit of Avalanche Mountain, Selkirk Mts., B.C.; Mt. Queest, Shuswap Lake, B.C. Alt. 6,000 feet. (*Jas. M. Macoun.*) Not recorded before from British Columbia. Specimens from Kicking Horse Lake, taken from a landslide at the foot of a mountain, show a great divergence in habit from those collected at the summit of the same mountain, 3,000 feet higher. These latter are scarcely an inch in height, and have in some cases a barely perceptible stem; the plants from the lower levels are more than a foot high.

ANTENNARIA ALPINA, Gaertn.; Macoun, Cat. Can. Plants, Vol. I., pp. 236 and 548.

Mountains north of Griffin Lake, B.C.; Revelstoke, B.C.; Spence's Bridge, B.C.; summit of Mount Arrow-smith, Vancouver Island. (*John Macoun.*)

ANTENNARIA CARPATHICA, R.Br.; Macoun, Cat. Can. Plants, Vol. I., pp. 236 and 548.

Additional stations for this species are: mountains at Roger's Pass, Selkirk Mts., B.C., alt. 6,500 feet; near Ainsworth, Kootanie Lake, B.C.; Spence's Bridge, B.C. (*John Macoun.*) Mount Queest, Shuswap Lake, B.C.; mountains at Griffin Lake, B.C. (*Jas. M. Macoun.*) Sucker Mountain, B.C. (*Jas. McEvoy.*)

ANTENNARIA CARPATHICA, R. Br., var. PULCHERRIMA, Hook. Macoun, Cat. Can. Plants. Vol. I., pp. 237 and 548.

Guichon Creek, B.C.; mountains south of Tulameen River, B.C. (*Dr. Geo. M. Dawson.*) Spence's Bridge,

B.C.; C che Creek Mountain, B.C. (*John Macoun.*) The C che Creek specimens were referred to *A. Carpathica* in Prof. Macoun's Catalogue. Not before recorded west of Selkirk Mountains.

ANTENNARIA DIOICA, Gaertn.; Macoun, Cat. Can. Plants, Vol. I., pp. 236 and 548.

Charlton Island, James Bay, Hudson Bay, the var. *parviflora*, T. & G. (*Jas. M. Macoun.*) Our herbarium material shows typical *A. dioica*, Gaertn., to be common from Assiniboia west through the Rocky Mountains to Kamloops, B.C., and north to Fort Smith on Great Slave River. The pink-flowered form is almost as common, but has not been found east of Belly River, Alberta.

GNAPHALIUM DECURRENS, Ives, var. CALIFORNICUM, Gray.

In open woods at Revelstoke, B.C., and at Ainsworth, Kootanie Lake, B.C., 1890. (*John Macoun.*) New to Canada.

GNAPHALIUM MICROCEPHALUM, Nutt.; Macoun, Cat. Can. Plants, Vol. I., p. 548.

Qualicum, Vancouver Island, and Protection Island, Nanaimo, V.I. Herb. No. 430. (*John Macoun.*)

XANTHIUM SPINOSUM, L.

On ballast, Nanaimo, Vancouver Island. (*John Macoun.*) Recorded before only from Ontario.

RUDBECKIA HIRTA, L.

About deserted dwellings, Kicking Horse River, Rocky Mountains. (*J. M. Macoun.*) Revelstoke, B.C.; Griffin Lake, B.C. (*John Macoun.*) Not before recorded west of the prairie region. Probably introduced by means of the railway.

HELIANTHUS DIVARICATUS, L.

Our specimens of this species show a wider range of cauline leaf forms than are included in Gray's descriptions. They vary from the ovate-lanceolate form, deeply and regularly serrate, to ovate with *obtuse* or *rounded* tips, with the serration barely apparent. Specimens collected at The Chats, Ottawa River, by Mr. Cowley, are farthest from typical *divaricatus*—the truncate, sessile, obtuse leaves, not being even divaricate.

HELIANTHUS RIGIDUS, Desf.

In thickets, Revelstoke, B.C. (*John Macoun.*) Not before recorded west of prairie region. Probably introduced from the east along the Canadian Pacific Railway.

BIDENS CERNUA, L.

New Westminster, B.C. Herb. Nos. 457 and 458. (*John Macoun.*) Not before recorded west of Rocky Mountains.

BIDENS FRONDOSA, L.

New Westminster, B.C. Herb. No. 456. (*John Macoun.*) Not before recorded west of Rocky Mountains.

MADIA FILIPES, Gray; Macoun, Cat. Can. Plants, Vol. I., p. 248.

Nanaimo, Vancouver Island, Herb. No. 461; Deer Park, Lower Arrow Lake, Columbia River, B.C. (*John Macoun.*)

ARTEMISIA ABSINTHIUM, L.

Waste places at Medicine Hat, Assa., 1895. (*John Macoun*, Herb. No. 10,980.) Not before recorded west of Ontario.

ARTEMISIA LUDOVICIANA, Nutt.

Along roadsides at Port Arthur, Ont., 1889. (*Dr. and Mrs. N. L. Britton and Miss Timmerman.*) On the Cana-

dian Pacific Railway, near the station at Chalk River, Ont. Herb. No. 10,985. (*John Macoun.*) Doubtless introduced from the west in both cases.

SENECIO FASTIGIATUS, Nutt.

S. megacephalus, Macoun, Cat. Can. Plants, Vol. I., p. 263.

Belly River, Alberta, 1881. (*Dr. Geo. M. Dawson.*) Souris Plain, Assa. (*J. M. Macoun.*) Indian Head, Assa. (*David Macoun.*) Alkaline flats, near Twelve-mile Lake, Wood Mountain, Assa., Herb. No. 11,615. (*John Macoun.*)

SENECIO MEGACEPHALUS, Nutt.

S. amplexans, Macoun, Cat. Can. Plants, Vol. I., p. 264.

South Kootanie Pass, Rocky Mountains, 1881. (*Dr. G. M. Dawson.*) Amongst debris on mountain sides, Sheep Mountain, Waterton Lake, Lat. 49° 05', Rocky Mountains. Herb. No. 11,631. (*John Macoun.*) New to Canada.

CICHORIUM INTYBUS, L.

Winnifred, Assa. (*W. Spreadborough.*) Sicamous, B.C. (*John Macoun.*) Not before recorded between Ontario and the Pacific Coast.

STEPHANOMERIA RUNCINATA, Nutt.

S. minor, Macoun, Cat. Can. Plants, Vol. I., p. 284, in part.

On a dry clay bank, south of Wood Mountain, Assa., 1874. (*Dr. G. M. Dawson.*) Many Berries Creek, Milk River, Assa. (*John Macoun.*) New to Canada.

ASCLEPIAS PURPURASCENS, L.; Macoun, Cat. Can. Plants, Vol. I., p. 320.

Walpole Island, Lambton County, Ont. (*C. K. Dodge.*)

ASCLEPIAS SULLIVANTII, Engelm.

Walpole Island, Lambton County, Ont. (*C. K. Dodge.*)
New to Canada.

GENTIANA PUBERULA, Michx.

On the Humber Plains, near Toronto, Ont., 1895.
(*Wm. Scott.*) New to Canada. All the references under
G. puberula, Macoun, Cat. Can. Plants, go to *G. affinis*,
Griseb.

LITHOSPERMUM ANGUSTIFOLIUM, Mx.

Sandy soil at the beach at Hamilton, Ont. (*J. M.*
Macoun.) Not before recorded east of Manitoba.

OROBANCHE PURPUREA, Vill.

Found growing on a lawn at Wingham, Ont. (*J. A.*
Morton.) Probably introduced in grass seed. New to
Canada.

UTRICULARIA RESUPINATA, B. W. Green; Can. Rec. of
Science, Vol. VI., p. 204.

On an island near the north shore of Parry Sound,
Lake Huron, 1893. (*J. M. Dickson.*) Only authentic
record for Ontario.

VERONICA VIRGINICA, L.; Macoun, Cat. Can. Plants, Vol. I.,
p. 360.

Found by Prof. Macoun near Savanne station on the
C. P. Railway, west of Port Arthur, in 1889. Probably
introduced at this particular place, but indigenous further
west along the railway. Credited to the Winnipeg Valley
by Gray, but on what authority is not stated. Walpole
Island, Lambton Co., Ont. (*C. K. Dodge.*)

PEDICULARIS SCOPULORUM, Gray.

Summit of Saddle Mountain, Devil's Lake, Rocky

Mountains, alt. 8,000 feet. (*John Macoun.*) New to Canada.

PYCNANTHEMUM MUTICUM, Pers.

Near Hamilton, Ont. (*J. M. Dickson.*) New to Canada.

CAREX FESTIVA, Dew., var. *HAYDENIANA*, W. Boott.

Borders of coulees, Cypress Hills, Assa., 1894. Herb. No. 7,397. (*John Macoun.*) Not before recorded east of Rocky Mountains.

LYCOPODIUM OBSCURUM, L.; Macoun, Cat. Can. Plants, Vol. II., p. 288.

Near Fort Norman, Mackenzie River, 1892. (*Miss E. Taylor.*) Revelstoke, B.C., 1890. (*John Macoun.*) Not before recorded north or west of the Saskatchewan.

LYCOPODIUM INUNDATUM, L.

Swamp at "The Lake," Stanley Park, Vancouver, B.C., 1893. Herb. No. 527 (*John Macoun.*) Not before recorded west of Ontario.

